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CIA-RDP86-00513R000928220008-0"

~~KUZNETSOVA, I.A.~~

Protein fractions of the blood during acute dysentery in children.
Nauch. trudy Kaz. gos. med. inst. 14:469-470 '64. (MIRA 18:9)

1. Kafedra detskikh bolezney (zav. - prof. Yu.V.Makarov) Kazan-
skogo meditsinskogo instituta.

ACC NR: AP7002997 (A,N) SOURCE CODE: UR/0413/66/000/024/0103/0103

INVENTOR: Antonova, Ye.A.; Kuznetsova, L.A.

ORG: none

TITLE: Solder for joining metal to metal, ceramics or cermets. Class 49, No. 189668

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 24, 1966, 103

TOPIC TAGS: solder, metal ~~joining~~ soldering, METAL JOINING, CERAMIC. TO METAL SPAL, CERMET

ABSTRACT: This Author Certificate introduces a solder for joining metal to metal, ceramics or cermets. The solder consists of a filler and a binder, such as a noncaustic glass. To improve the air-tightness and oxidation resistance of the joint, the filler contains 20% chromium, 70% nickel, 5% boron, and 5% silicon. [TD]

SUB CODE: 13,11/SUBM DATE: 168ep63/ ATD PRESS: 5114

Card 1/1

UDC: 621.791.36

L 15750-66 EWP(e)/EWT(m)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/WW/JG/WH

ACC NR: AT5027952

SOURCE CODE: UR/0000/65/000/000/0162/0169

AUTHOR: Antonova, Ye. A.; Kuznetsova, L. A.; Ivanova, L. A.

ORG: none

TITLE: Chromium-carbide oxidation resistant coatings

SOURCE: Seminar po zharestoykim pokrytiyam. Leningrad, 1964. Zharestoykiye pokrytiya (Heat-resistant coatings); trudy seminarov, Leningrad, Izd-vo Nauka, 1965, 162-169

TOPIC TAGS: chromium carbide, metal coating, cermet product, heat resistance, oxidation inhibition, corrosion resistance, protective coating, steel, carbide

ABSTRACT: Chromium carbide Cr_3C_2 has a high resistance to the action of acids, does not react with Cl at temperatures $\leq 900-1000^\circ C$ and with air at $\leq 1400^\circ C$, and has a thermal expansion coefficient nearly the same as that of steel. This work was aimed at studying the conditions for forming cermet-type coatings on steel. The composition of the coating was Cr_3C_2 binder. Samples of St. 3 steel (10x15x 2 mm) were sandblasted before coating. The water suspensions (slips) were

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L 15750-66

ACO NR: AT5027952

3 K
prepared from mixtures of powdered compounds with an addition of 2% bentonite. They were applied to the samples by immersion and fixed by baking at the formation temperature T in an inert atmosphere, mostly Ar, but some samples were also baked in N. NH₃, and in a vacuum of 10⁻²-10⁻³ mm. Hg. Several types of powdered mixtures were used: (1) 85%, 70%, 50%, or 30% Cr₃C₂ + 15%, 30%, 50%, or 70% Ni at temperatures of 1150-12500; (2) 85%, 70%, 50%, or 30% Cr₃C₂ + 15%, 30%, 50% or 70% Nichrom (20% or and 80% Ni alloy) at temperatures of 1170-12500; and (3) 90%, 70%, and 5% Si) at temperatures of 1140-12400. All coatings were formed at temperatures lower than the melting points of their components. The formation of a uniform nonporous coating occurred within a narrow range of temperatures. Slight overheating (20-300) resulted in the formation of beads, and heating below T produced a porous coating. An increase in the amount of binder widened the temperature range of the formation of a uniform nonporous coating. The best results were obtained with coatings having a binder made from a mixture of Cr, Ni, Si, and B powders, the concentration of the binder being 30-50 parts by weight. The coatings with two carbides (Cr₃C₂ 65%, TiC 20%, and the balance of the mixture made from Cr, Ni, Si, and B taken in the same amounts as in mixture (3) were baked on St. 3 steel in a vacuum at 1220-12500, in N at 1230-12600, and in NH₃ at 1230-12600 and

2/3

L 15750-66

ACC NR: AT5027952

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compared with coatings containing one carbide (60% Cr₂O₃ and a mixture of 40% Cr, Ni, Si, and B). The coating with two carbides (containing less binder than the coating with one carbide) formed approximately equally in vacuum or in N, Ar, or H₂, and did not form in air. Carbide coatings effectively protected an ordinary steel against oxidation at temperatures ≤ 1000 for a prolonged time (> 100 hr). The high stability of carbide coatings with respect to oxidation at high temperatures was attributed to the formation of a stable film of the spinel type (Cr₂O₃, NiO) that was strongly adherent to coating. Carbide coatings were 15 to 20 times more resistant to (abrasive) wear than the quartz glass and hence the silicate enamels. Metallographic studies revealed the presence of a transition layer between the metal and the coating which was formed by diffusion. The transition layer did not etch in a 5% alcohol solution of HNO₃. Orig. art. has: 2 figures and 4 tables.

SUB CODE: 11/ SUBM DATE: 20Jul65/ ORIG REF: 010/ OTH REF: 003

3/3 SM

TESLENKO, Ivan Ivanovich; KITASHOVA, Valentina Fedorovna;
KUZNETSOVA, L.A., red.; KRYUKOV, V.L., spets. red.

["Carrousel-type" milking systems; from practices in the
use of milking conveyors] Doil'nye ustanovki "Karusel";
iz opyta primeneniia konveiermykh doil'nykh ustanovok.
Moskva, Biuro tekhn. informatsii, 1964. 95 p.
(MIRA 18:5)

L 5382-66 EWP(e)/EWT(m)/EWP(i)/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/HW
ACC NR: AP5024997 SOURCE CODE: UR/0286/65/000 /016/0061/0061

INVENTOR: Antonova, Ye. A.; Kuznetsova, L. A.
44.55 44.55

ORG: none

TITLE: Method of protecting steel against gas corrosion,⁴⁴ Class 22, No. 173865

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 61

TOPIC TAGS: steel, corrosion, gas corrosion, corrosion prevention, steel corrosion prevention, corrosion resistant coating

ABSTRACT: This Author Certificate introduces a method of protecting steel against gas corrosion by means of a coating consisting of a filler and a silicate-metal binder. To improve the oxidation resistance of the coating, chromium carbide is used as a filler. In a variant of the method, the silicate-metal binder consists of 15—25 (weight) parts chromium, 2—6 parts boron, 65—75 parts nickel and 3—10 parts silicon.
27 27 27 [ND]

SUB CODE: MM,IE/ SUBM DATE: 03Oct62/ ATD PRESS: 4137

OC
Card 1/1

UDC: 620.197:621.793

090/1182

010

OTHER 002

Card 2/2

SAMOYLOVA, A.N.; MAL'TSEV, V.A.; TATEVSKIY, V.M.; KURDYUMOVA, I.N.;
KUZNETSOVA, L.A.

Absorption spectrum originated by photolysis of boron chloride
with ozone. Zhur. fiz. khim. 37 no.4:909 Ap '63.

(MIRA 17:7)

1. Moskovskiy gosudarstvennyy universitet.

... ..
... ..
... ..

... ..

... .. anion exchange resin, graft copolymer, vinylidene chloride,
... .. anionite

... .. the purpose of this work was to study the replacement of
... ..
... ..
... ..

... ..
... ..
... ..
... .. Chloric Acid, washed with water

AP: APS010992

— to constant weight. The low content of residual chlorine
indicated probable loss of chlorine during the
process. The authors note that the
exchange capacity toward Ca^{2+} ions was 5.4—5.8
meq/g toward 0.1 N HCl. The authors deduce from experimental data
that at high temperatures the vinyl groups of the
resins are converted to tertiary amine groups either
via the polymerization of the vinyl groups or via the
reaction of the pyridine rings with HCl .

Authors: Moskovskiy khimiko-tekhn. i. i. Institut im. D. I.
Mendeleeva (Moscow Chemicotechnical Institute)

SUBMITTED: 17Jun63
NO REF SOV: 005

ENCL: 00
OTHER: 004

SUB CODE: OC, MT
ATD PRESS: 3236

Card 2/2

PANIN, V.Ye.; KUZNETSOVA, L.D.

Nature of transformations in unformed α -brasses. Fiz. met.
i metalloved. 17 no.5:798-800 My '64. (MIRA 17:9)

1. Sibirskiy fiziko-tekhnicheskii institut.

KUZNETSOVA, L. F.

1204

DECEASED

c. '64

KUZNETSOVA, I.F.

Effect of repeated antigen injections on the titer of agglutinating sera and changes in the fractional composition of serum proteins. Vak. i svv. no.1:151-158 '63.

Effect of antigen doses and intervals between injections on the dynamics of agglutinin formation and the fractional composition of proteins of agglutinating sera. Ibid.:159-165

(MIRA 18:8)

1. Moskovskiy Institut epidemiologii i mikrobiologii.

SAVINKOV, V.M., prepod.; SHURAKOV, V.V., prepod.; BASAVINA, Ye.V.,
red.; KUZNETSOVA, L.G., red.

[Programming for the "Minsk-1" electronic digital computer;
methodological manual for students of the correspondence
section of the department of machine accounting and comput-
ing operations] Programmirovaniie dlia ETsVM "Minsk-1";
uchebno-metodicheskoe posobie dlia studentov zaocnogo ot-
deleniia fakul'teta mekhanizatsii ucheta i vychislitel'nykh
rabot. Moskva, Vysshaia shkola, 1964. 244 p. (MIRA18:7)

GERONINUS, Boris L'vovich; KUZNETSOVA, L.G., red.

[Using mathematical methods in planning automotive
freight transportation] Primenenie matematicheskikh
metodov v planirovanii avtomobil'nykh perevozok. [n.p.]
Rosvuzizdat, 1963. 82 p. (MIRA 17:7)

SLODODSKAYA, Viktoriya Aleksandrovna; BOKHAN, K.A., nauchn. red.;
KUZNETSOVA, L.G., red.

[Short course in higher mathematics] Kratkii kurs vysshei
matematiki. Podol'sk, Vysshiaia shkola, 1963. 495 p.
(MIRA 17:9)

USSR/Biology

FD-1579

Card 1/1 : Pub. 42-11/11

Author : Getmanov, Ya. Ya. and Kuznetsova, L. G.

Title : On the question of the biology of sphagnum

Periodical : Izv. AN SSSR. Ser. biol. 5, 135-144, Sep-Oct 1954

Abstract : Studied the effect of separate chemical factors on growth and coloration of sphagnum. Sphagnum used in the experiment were *S. fuscum*, *S. medium*, and *S. recurvum*. Organic and inorganic solutions were used as culture media, as follows: Organic: cane sugar, levulose, lactose, lactic acid, and acetic acid in various concentrations. Inorganic: a mixture of mineral salts (NaNO_3 , NaH_2PO_4 , KCl , CaSO_4) in distilled water, also four solutions of the same mixture without N, K, P, and Ca, and in addition a solution of CaSO_4 in distilled water. Tables. Seven references: 6 USSR (all prior to 1940)

Institution : Komi Affiliate of the Academy of Sciences of the USSR, town Syktyvkar

Submitted : January 28, 1954

KUZNETSOVA, L.G.

Comparing the telluric lines of O_2 at different altitudes above
sea level. Trudy Sekt. astrobot. AN Kasakh. SSR 8:240-244 '60.

(MIRA 13:12)

(Oxygen)

(Fraunhofer lines)

KUZNETSOVA, L.G., inzh.; YUR'YEV, N.M., inzh.

Basic indices of the efficiency of new equipment. Vest.mashinostr.
43 no.3:79-82 Mr '63. (MIRA 16:3)

(Industrial equipment)

AVERICHEV, Yevgeniy Petrovich; AKSINEVICH, Vladimir Iosifovich;
RASKIN, Mikhail Nikolayevich; KUZNETSOVA, L.G., red.

[Reconditioning plunger pairs; practice of the Zaraysk
Machinery Plant] Vosstanovlenie plunzhernykh par; iz
opyta raboty Zaraiskogo mekhanicheskogo zavoda. Moskva,
Biuro tekhn. informatsii, 1964. 31 p. (MIRA 18:5)

ZHUKOV, N.A.; MYTAREV, A.G.; PARAMONOV, A.I.; SAFONOV, A.A.;
SILKIN, N.P.; SLUTSKIY, Ya.L.; FROLKOV, P.P.;
KUZNETSOVA, L.G., red.

[Centralized repair of hydraulic systems; work practice of
the Mikhailov Regional Association of "Sel'khoztekhnika"
of Ryazan Province] Tsentralizovanniy remont gidrosistem;
opyt raboty Mikhailovskogo raionnogo ob"edineniya "Sel'-
khoztekhnika" Riazanskoi oblasti. Moskva, Biuro tekhn.
informatsii, 1964. 14 p. (Peredovoi opyt i predlozheniya.
Seriya 1. Remont mashinnotraktornogo parka) (MIRA 18:5)

RADIN, S.Ye.; KUZNETSOVA, L.G., red.

[Operation of digital computer devices in program control systems; methodological manual for the independent study of correspondence students in courses in "Automatic control" and "Calculating and computing apparatus"] Rabota tsifrovyykh vychislitel'nykh ustroystv v sistemakh programmnogo upravleniya; metodicheskoe posobie dlia samostoiatel'noi raboty studentov-zaochnikov po kursam: "Avtomaticheskoe regulirovaniye" i "Schetno-reshalushchie pribory." [n.p.] Mosvuzizdat, 1963. 38 p.

(MIRA 17:9)

RYVKIN, Al'bert Anatol'yevich; RYVKIN, Anatoliy Zalmanovich;
KHRENOV, Leonid Sergeyevich, prof.; KUZNETSOVA, L.G., red.

[Mathematical handbook for correspondence students of
secondary technical schools] Spravochnik po matematike dlia
uchashchikhsia-zaochnikov srednikh spetsial'nykh uchebnykh
zavedenii. Moskva, Vysshaya shkola, 1964. 519 p.
(MIRA 18:2)

KISELEV, A.I.; KRASNOV, M.L.; MAKARENKO, G.I.; KUZNETSOVA, L.G.,
red.

[Problems in ordinary differential equations] Sbornik
zadach po obyknovennym differentsial'nym uravneniam.
Moskva, Vysshaya shkola, 1965. 235 p. (MIRA 18:2)

YEVGEN'YEV, Il'ya Borisovich; KUZNETSOVA, Lyubov' Iosifovna; KRINOV, Ye.L.,
nauchnyy red.; PROKHODTSOVA, S.Ya., red.; VILENSKAYA, N.N., tekhn.
red.

[In search of the fiery stone] Za ognennym kamnem. Moskva, Gos.
izd-vo geogr. lit-ry, 1958. 212 p. (MIRA 11:10)

1. Uchenyy sekretar' komiteta po meteoritam Akademii nauk SSSR
(for Krinov).

(Meteorites)

KUZNETSOVA, Lyubov' Iosifovna; YEVGEN'YEV, Il'ya Borisovich; PRO-
KHODTSEVA, S.Ya., red.; ZORKINA, G.P., mladshiy red.; VILENSKAYA,
E.N., tekhn.red.

[Mystery of the Island of Saaremaa] Taina ostrova Saaremaa.
Moskva, Gos.isd-vo geogr.lit-ry, 1960. 122 p.

(MIRA 13:6)

(Osel (Island)--Meteorites)

- KUZNETSOVA, Lyubov' Iosifovna; KROPOTKIN, P.N., doktor geol.-minер.
nauk, nauchnyy red.; KAPELUSH, S.I., red.; MAL'CHEVSKIY, G.N.,
red. kart; VILENSKAYA, E.N., tekhn. red.

[Shifting continents] Kuda plyvut materiki. Moskva, Geografiz,
1962. 117 p.

(Wegener, Alfred Lothar, 1880-1930)

✓ KONOVALOV, Vasil'y Vasil'yevich; KUZNETSOVA, Lyudmila Ivanovna;
KOVAL'CHUK, V.S., prepodavatel', retsenzent; POKROVSKIY,
D.V., prepodavatel', retsenzent; KHACHATUROV, V.V., red.;
USANOVA, N.B., tekhn. red.

[Radio navigation equipment on ships] Sudovye radionavigatsion-
nye ustroistva. Moskva, Izd-vo "Morskoi transport," 1962. 374 p.
(MIRA 16:2)

(Radio in navigation) (Radar in navigation)

KONOVALOV, V., starshiy prepodavatel'; KUZNETSOVA, L. I.
OSOKIN, B., starshiy prepodavatel'; RUBTSOV, N.

Attachment of radar equipment helping to distinguish the
side of an approaching vessel. Mor. flot 22 no.8:23-25
Ag '62. (MIRA 15:7)

1. Vysshaye voyenno-inzhenernoye morskoye uchilishche.
(Radar in navigation)
(Collisions at sea--Prevention)

MEL'NIKOV, Yu.L.; KUZNETSOVA, L.I.

Clinical documentation in the practice of medical jurisprudence.
Zdrav. Belor. 6 no. 10:47-48 0 '60. (MIRA 13:10)

1. Iz kafedry sudebnoy meditsiny Vitebskogo meditsinskogo
instituta (zaveduyushchiy kafedroy - dotsent Yu.L. Mel'nikov).
(MEDICAL JURISPRUDENCE)

GNATYSNĀK, A.I., doktor med.nauk; KUZNETSOVA, L.I.

Results of treating patients with lymphogranulomatosis. Vrach.
delo no.12:77-79 D '60. (MIRA 14:1)

1. Kafedra propedevticheskoy khirurgii (sav. - prof. G.P. Kovtunovich)
L'vovskogo meditsinskogo instituta.
(HODGKIN'S DISEASE)

KUZNETSOVA, L. I.

USSR/Metals - Analysis, Colorimetric
Nonferrous Metals

May 50

"Colorimetric Determination of Small Quantities of Phosphorus, Arsenic, and Silicon in Nickel and Copper," N. A. Filippova, L. I. Kuznetsova, State Inst of Nonferrous Metals, 9 $\frac{1}{2}$ pp

"Zavod Lab" Vol XVI, No 5

Develops colorimetric methods for determination of phosphorus, arsenic, and silicon in nickel and copper based on selective and successive extraction of heteropolyacids with various organic solvents. Relative error is not higher than 8-10%. Methods permit determination of all three elements from one sample not heavier than 5 g and reduce time of analysis from usual 5-6 days to one working day.

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D228/D304

5 3400

AUTHORS:

Kuznetsova, L. I., and Gavrilova, I. V.

TITLE:

Laboratory method of growing pentaerythrite crystals

SOURCE:

Akademiya nauk SSSR. Institut kristallografii. Rost
kristallov, v. 3, 1961, 283-285

TEXT: Previous attempts to prepare pentaerythrite crystals--used as monochromators in X-ray analysis--have not met with much success, so the authors studied the best method of growing these crystals from aqueous solutions with a slowly decreasing temperature. Pentaerythrite, $C(CH_2OH)_4$, belongs to the tetragonal system and has the following charac-

teristics: an S_4^2 space-group; lattice parameters $a = 6.10 \pm 0.02 \text{ \AA}$,

$c = 8.73 \pm 0.02 \text{ \AA}$; a density $\rho = 1.417 \text{ g/cm}^3$; a configuration of two tetragonal tetrahedra with additional (001) and (100) faces; and (001), (110) and (100) cleavages. The crystals were grown in the temperature range 80 - 92°;

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Laboratory method of...

the crystallizer was a hermetically sealed Erlenmeyer flask, placed in a thermostat with a contact thermometer, relay, mechanical mixer and refrigerator. Under static conditions, the primer was attached to the bottom of the flask; for the dynamic set-up, either the same procedure was followed or else the primer was fixed to the cover at the elongated end of a rotating glass crystal-carrier. The static method is recommended in view of the poor stability of pentaerythrite between 80° and 92° which impedes the formation of large crystals. Pentaerythrite crystals are very sensitive to temperature and supersaturation changes: any inopportune reduction of the temperature or increase of the supersaturation, however slight, causes structural damage and the appearance of extra 001 faces. Nevertheless, it is possible in a period of 10 days to grow crystals weighing 50 g, and the authors conclude that even larger crystals may be obtained by using a crystallizing-flask with a capacity in excess of 300 ml. There are 4 figures.

X

Card 2/2

GAVRILOVA, I.V.; KUZNETSOVA, I.I.

Characteristics of the growth of potassium dihydrophosphate
single crystals. Rent krist. 4:85:88 '64. (MIRA 17:8)

KUZNETSOVA, L. I. .

KUZNETSOVA, L. I. - "Investigation of a compensated electricmotor regulator with an elongated field". Moscow, 1955. Min Higher Education USSR.
Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov.
(Dissertation for the Degree of Candidate of Technical Sciences).

SO: Krishnaya Letopis' No. 46, 12 November 1955. Moscow

KUZNETSOVA, L.I.

AUTHORS: Goryainov, Fedor Alekseyevich, Candidate of Technical Sciences, Docent at the Chair of Electrical Machines at the Moscow Institute of Power Engineering, Kuznetsova, Larisa Ivanovna, Candidate of Technical Sciences, Assistant at the Chair of Electrical Machines at the All-Union Institute of Power Engineering

TITLE: On the Problem of the Compensated Electrodynamical Longitudinal-Field Controller (K voprosu o kompensirovannom elektromashinnom regulatore prodol'nogo polya)

PERIODICAL: Nauchnyye doklady vysshey shkoly, Elektromekhanika i avtomatika, 1958, Nr 1, pp. 122 - 130 (USSR)

ABSTRACT: The particular features of the compensated electrodynamical longitudinal-field controllers used in automatic electric drives are exposed. They permit to increase the quality of existent electro dynamical longitudinal-field controllers. First a non-compensated longitudinal-field controller with a self-exciting parallel winding and with a control winding is investigated. If the mean-value i_k of the additional currents across the commutating segment is computed according to the mean value of the additional $e = e_k - e_R$ in the commutating segment, which equals $(e_k > e_R)$ a positive current i_k is obtained with an accelerated commutation ($e_k < e_R$) and a negative

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On the Problem of the Compensated Electrodynamical
Longitudinal-Field Controller

SOV/ 161-58-1-15/33

current i_k with a retarded commutation ($e_k < e_R$). e_k denotes the commutating EMF and e_R the reactive EMF. In the second chapter the degree of compensation of the armature reaction is investigated. The degree ξ of compensation of the transverse armature reaction in the zone of the main poles must be chosen equal to unity or somewhat larger. If the compensation is complete the field at load will be the same as at idling. In this case no local increase of induction and of the voltage between neighboring commutator segments occurs. Thus the danger of a flashing-over at the commutator is abolished. It is possible to increase the linear load of the armature, when a compensation is present. Thus the amplification coefficient of the controller can be increased. The third section deals with the amplification and the factor of merit. According to formulae (11) and (12) both factors will increase in a machine with a greater linear armature load and a higher speed. It will also increase when the air gap is smaller, the straying, the saturation of the machine and the induction in the air gap are higher. With a compensation winding the transverse armature

Card 2/4

On the Problem of the Compensated Electrodynamical
Longitudinal-Field Controller

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reaction can be completely compensated. Thus a saturation in the slot zone can be removed. In the fourth chapter the time constant is investigated. Formula (13) for the time constant T (Ref 2) of the exciter winding is written down. Its analysis shows that the number of poles ($2p$) the maximum admissible armature speed (v_a) and the current density in the exciter winding must be increased in order to reduce the time constant. The frame of the machine is to be laminated in order to reduce the slowing-down effect of eddy currents upon the velocity of transient processes. In the fifth section the test runs are described. The model of a compensated electrodynamical controller was subjected to test runs at a static and at a transient mode of operation. The amplification factor and hence the factor of merit of the controller is considerably influenced by the degree of compensation of the transverse armature reaction and by the resistance of the self-exciter winding. The gradient of a current rise in the armature is greater almost by a factor of 5 than in a controller without a compensation winding. The compensated controller exhibits a sufficiently great high-speed

Card 3/4

On the Problem of the Compensated Electrodynamical
Longitudinal-Field Controller

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action and a stable operation. Thus it needs no stabilizing devices. As compared to the longitudinal-field controller the compensated electrodynamical controller is simple and reliable. It can be recommended: 1) For electric drives in iron metallurgy and for electric drives of reversing milltrains. 2) Instead of a cascade connection of two one-stage electrodynamical controllers. 3) As a control of the exciter winding of large synchronous machines. There are 3 figures, 3 tables, and 5 references, which are Soviet.

ASSOCIATION:

Kafedra elektricheskikh mashin Moskovskogo
energeticheskogo instituta (Chair of
Electrical Machines at the Moscow Institute of Power Engineering);
Kafedra elektricheskikh mashin Vsesoyuznogo energeticheskogo instituta
(Chair of Electrical Machines at the All-Union Institute of Power
Engineering)

SUBMITTED: January 3, 1958

Card 4/4

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S/112/59/000/015/039/068
A052/A002

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 15, p. 162,
32109

AUTHOR: Kuznetsova, L.I.

TITLE: Investigation of a Compensated Rotary Longitudinal Field Regulator

PERIODICAL: Tr. Vses. zauch. energ. in-ta, 1958, No. 9, pp. 149-160

TEXT: Advantages of rotary amplifiers with a longitudinal field compared with those with a transverse field are discussed. Principal relations of parameters of the machine are derived and the influence of the degree of compensation of the armature reaction is investigated. It is shown that in order to increase the coefficient of amplification and the Q-factor it is advisable to increase the rotational speed of the machine and the load of the armature, to decrease the gap, induction and saturation. The experimental part of the study was carried out on a machine of 0.75 kw with an operating voltage of 60 volts and a rotational speed of 2950 rpm. Main poles of the machine had 5 windings (control, parallel self-excitation, voltage and current feedback).

Card 1/2

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S/112/59/000/015/039/068
A052/A002

Investigation of a Compensated Rotary Longitudinal Field Regulator

In the shoes of main poles grooves were stamped to accomodate the compensating winding balancing the transverse armature reaction. Data on windings, values of the coefficient of amplification and equivalent time constants are given. There are 5 illustrations and 3 references.

I. Ya. L.

Translator's note: This is the full translation of the original Russian abstract.

LX

Card 2/2

MARCHUK, G.I.; ILYASOVA, G.A.; KOLESOV, V.Ye.; KOCHERGIN, V.P.;
KUZNETSOVA, L.I.; POGUDALINA, Ye.I.

[Critical masses of uranium - beryllium reactors] Kriti-
cheskie massy uran-berillievykh reaktorov. Moskva, Glav.
upr. po ispol'zovaniyu atomnoi energii, 1960. 8 p.
(MIRA 17:1)

MARCHUK, G.I.; ILYASOVA, G.A.; KOLESOV, V.Ye.; KOCHERGIN, V.P.;
KUZNETSOVA, L.I.; POCUDALINA, Ye.I.

[Critical masses of uranium-graphite reactors] Kriticheskie massy uran-grafitovykh reaktorov. Moskva, Glav. upr. po ispol'zovaniyu atomnoi energii, 1960. 17 p.
(MIRA 17:1)

RUSSIAN BOOK EXPLANATION NOV/5337

Panashov, Ye. I., ed.

Isakovich, V.I. Kriticheskiy parametroy reaktorov s atomnymi istochnikami (Study of Critical Parameters of Reactor Systems; Collection of Articles) Moscow, Gosatomizdat, 1960. 117 p. Russian allg inserted. 3,600 copies printed.

Techn. Ed.: V.A. Vlasov.

PURPOSE: This collection of articles is intended for nuclear physicists and engineers of nuclear power plants.

COVERAGE: The book contains previously unpublished original articles concerned with the theoretical calculation of neutron flows and of critical parameters (critical masses and volumes) of various reactor systems: uranium-graphite, uranium-beryllium, and water mixtures of uranium and plutonium. Individual articles present tables and graphs used in the determination of the dependence of critical parameters on the relative concentration and the character of the fissionable material and the moderator, as well as on fuel enrichment for a wide range of neutron energy spectra. The following are mentioned: P.A. Gavrilin (scientific editor of the collection), and S.I. Solov'ev, L.I. Spalov, A. Ya. Ryndin, R.P. Maslennikov and V.J. Vladimirov (compilers of Table 1, table of values of coefficients k_{eff} and β). References accompany individual articles.

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AVAILABILITY: Library of Congress

Card 3/3

20/Nov/60
7-53-61

15

44680
5/869/62/000/000/004/012
B102/B186

21.10.00
AUTHORS:

Marchuk, G. I., Kochergin, V. P., Pogudalina, Ye. I.,
Kuznetsova, L. I.

TITLE:

Application of an effective one-group method to calculating of
nuclear reactors

PERIODICAL:

Teoriya i metody rascheta yadernykh reaktorov; sbornik
statey. Ed. by G. I. Marchuk. Moscow, Gosatomizdat, 1962,
79 - 85

TEXT: Several problems on applying one-group methods to criticality
calculations are discussed. Though one-group approximation is less accurate
than multi-group methods, it can be used for improving the critical
parameters. Since e.g. the formulas for averaging the constants are
fractional-linear functionals it is possible to average the constants with-
out needing to use the true solutions of the reactor equations. This can
be done by any approximate solution to these equations, e.g. the diffusion
or P_1 -approximation. The constants then used for calculating the critical
parameters yield a better approximation than P_1 . Several variants of

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Application of an...

applying one-group reactor equations are analyzed. If the system of reactor equations

$$\left. \begin{aligned} \nabla \varphi_1 + \Sigma \varphi_0 &= \int_{u=r}^u \Sigma_f(u-u') \varphi_0(r, u') du' \\ &+ \int_{-\infty}^u \Sigma_{in}(u') \omega(u, u') \varphi_0(r, u') du' + \chi(u) \lambda(r); \\ \frac{1}{\beta} \nabla \varphi_0 + \Sigma \varphi_1 &= \int_{u=r}^u \Sigma_f(u-u') \varphi_1(r, u') du' \end{aligned} \right\} \quad (1)$$

is represented as multi-group equations in P_1 approximation, the effective one-group constants are

$$\bar{\Sigma}_c = \frac{\int dr \varphi_0^* \bar{\Sigma}_c \varphi_0}{\int dr \varphi_0^* \varphi_0}, \quad \bar{\Sigma}_f = \frac{\int dr \varphi_0^* Q(r)}{\int dr \varphi_0^* \varphi_0}, \quad \bar{\Sigma}_{tr} = \frac{\int dr \nabla \varphi_0^* \nabla \varphi_0}{\int dr \nabla \varphi_0^* \varphi_1} \quad (10)$$

where

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S/869/62/000/000/004/012
B102/B186

$$Q(r) = \int_{-\infty}^{\infty} v \chi f \varphi_0(r, u) du, \quad \overline{\Sigma_0 \varphi_0} = \sum_{j=1}^m [\overline{\Sigma_0^j \varphi_0^j} + (1 - p^j) q^j], \quad \overline{\varphi_0} = \sum_{j=1}^m \overline{\varphi_0^j}, \quad \overline{\varphi_1} = \sum_{j=1}^m \overline{\varphi_1^j}$$

p^j is the resonance capture probability, q^j the moderator density, $\chi(u)$ is the fission spectrum, Σ the total macroscopic cross section, Σ_s and Σ_{in} elastic and inelastic scattering cross sections, r the maximum logarithmic energy loss, f_0 , f_1 and w are collision functions; $\overline{\Sigma_0}$, $\overline{\Sigma_{tr}}$ and $v\overline{\Sigma_f}$ are cross sections chosen such that the k_{eff} calculated from (1) and from the conjugate equations

$$-v\overline{\varphi_1^*} + \overline{\Sigma_0 \varphi_0^*} = v\overline{\Sigma_f \varphi_0^*}; \quad \frac{1}{3} \nabla \overline{\varphi_0^*} + \overline{\Sigma_{tr} \varphi_1^*} = 0 \quad (4),$$

coincide. In first approximation one can replace φ_0^* and φ_1^* in (10) by $\overline{\varphi_0}$ and $\overline{\varphi_1}$. With the one-group constants thus obtained the system (4) is solved, after which the constants are averaged again making use of (10). This process is repeated successively until k_{eff} from (4) becomes constant. X

Card 3/4

Application of an...

S/869/62/000/000/004/012
B102/B186

The one-group constants can be used for improving the critical mass parameters by solving the one-group kinetic equation

$$\Omega \nabla \varphi + \bar{\Sigma}_{tr} \varphi = \frac{\bar{\Sigma}_{tr} - \bar{\Sigma}_0 + \bar{\nu} \bar{\Sigma}_f}{4\pi} \int \varphi d\Omega \quad (11)$$

with the method of spherical harmonics. This is done for a spherical reactor with infinite water reflector. The critical mass of aqueous solutions of 90% enriched UO_2F_2 is calculated in P_3 -approximation using the above described one-group method and a multi-group method. The deviation is ~5%. Similar calculations are carried out for uranium graphite systems. There are 3 figures.

Card 4/4

COUNTRY USSR M
 C. INGS 22 : Cultivated Plants. Potatoes. Vegetables.
 Chasbits.
 ABC. JOUR: Zhur-Biologiya, No. 1, 1959, No. 1/1
 : Lashina, G.V., Kuchanov, A.I.; Kuchanova, L.I.
 : AL USSR
 TITLE : The Effect of Drought and Irrigation, in the
 Early Phases of Potato Development, on Tuber
 Formation and Tuber Crop.
 ORIG. PUB.: sb. Byul. sots. nauch. Ser. 1., AN
 USSR, 1959, 270-276
 ABSTRACT : As a result of vegetation and field experiment
 carried out under conditions of Zhetysay in the
 years of 1949-1952, the authors come to
 the conclusion that drought in the early phases
 of potato development retards the growth of
 plants and prevents the formation of a good
 tuber crop. In this period the most important
 for the receipt of an early high yield is
 to drought tolerant appears to be the potato
 -- I.A. Vashlovskiy

END: 1/1

TIMOFEYEV, V. N.; KASHTANOVA, S. P.; Prinimali uchastiye: KUZNETSOVA,
L. M., inzh.; GERASIMOV, G. I., laborant; CHERNIKOVA, P. I.,
laborant

Investigating coefficients of heat transfer by convection and
of the hydraulic resistance of new checkerwork shapes in blast
furnace air preheaters. Sbor. nauch. trud. VNIIMT no.8:68-105
'62. (MIRA 16:1)

(Blast furnaces) (Heat—Convection)
(Fluid mechanics)

TYLKIN, M.A.; ZASPITSKIY, N.A.; KUZNETSOVA, L.M.

Temperature service conditions and the heat resistance of
cutters for hot cutting. Izv. vys. ucheb. zav.; chern. met.
7 no.2:189-194 '64. (MIRA 17:3)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz i zavod
im. Dzerzhinskogo.

CA

11A

The cleavage of dihydroxyglutonic acid in the tissues of the animal organism. R. I. Vinokurova and L. M. Kuznetsova (Acad. Sci., Kiev). (Ukrain. Biokhim. Zhur. 26, 280-4 in Russian, 206-8 (1948)).—To det. the role of the dihydroxyglutonic acid (I) in the metabolism of ascorbic acid a soln. of dehydroascorbic acid was allowed to mutarotate for 18 days at room temp.; I was detd. photometrically after treating with 2,4-dinitrophenylhydrazine. About 1 mg. of I was added to 1 g. of tissue (20-25 slices of cherry) in a phosphate buffer; after 2 hrs. 40, 60, and 38% of I was split off by the liver tissues of rabbit; the variation was probably due to uneven interaction of the enzyme; the best conditions were at pH 6.5-6.8; there was no reaction below 4.3 and above 8; the activity was appreciably diminished at 80° in 5 min. and completely in 10-20 min. The activity of the tissues

of liver, kidney, brain, and muscle, resp. was 82.5, 50, 25, and 8%. The formation of glyoxylic and malic acids could be postulated as the subsequent stages of the biochemical conversion of I. Boris Gutoff

KUSNETSOVA, I. M.

③
A new method for determining vitamin A in preparations, concentrates, and fish oil. V. P. Yendt and I. M. Kusnetsova. (Inst. Biochem. Acad. Sci. Ukr. S.S.R., Kiev). *Ukrain. Biokhim. Zhur.* 21, 218-26 (in Russian, 227) (1949).
The method is based on the reaction taking place between vitamin A and IICl in glycerol 1,3-dichlorohydrin. It is about 1 1/2 times as sensitive and as accurate as any of the old procedures, and good detns. of vitamin A can be made in the presence of carotene without having to resort to the use of adsorbents. Results are calcd. with the aid of tables worked out for two variations of the method—photometric and photocolorimetric. The color developed is stable, which is an advantage over the Carr-Price method in which the color stability lasts only 10 sec. B. S. Levins

RM
11-23-54

VENDT, V.P.; KUZNETSOVA, L.M.

Study of unsaponifiable substances from certain invertebrates. Part 1.
Group D provitamins in Black Sea mussels. Ukr.biokhim.zhur. 22 no.2:
144-153 '50'. (MLRA 9:9)

1. Institut biokhimii Akademii nauk URSR, Kiy.
(BLACK SEA--MUSSELS) (PROVITAMINS)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928220008-0

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APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928220008-0"

KUZNETSOVA, L.M.

YERMAKOV, M.V.; KUZNETSOVA, L.M.

Effect of bloodletting and blood transfusion on the amount of blood
in the bone marrow in rabbits of various ages. Medych. zhurn. 23
no.5:15-21 '53. (MIRA 8:2)

1. Institut fiziologii im. O.O.Bogomol'tsya Akademii nauk URSR.
(MARROW--BLOOD SUPPLY) (BLOOD--TRANSFUSION)
(BLOODLETTING)

The determination of nicotinic acid, nicotinamide, and co-dehydrogenases I and II in muscle tissues by chromatographic methods. L. M. Kurnetsova and R. V. Chagovets (Inst. Biochem., Acad. Sci. U.S.S.R., Kiev). *Ukrain. Biochim. Zhur.* 27, 187-91 (Russian summary, 191-2) (1955). In paper chromatography, it is essential that the co-dehydrogenase-splitting enzymes be rapidly inactivated. To accomplish this the muscle tissue was ground in the cold, placed into a boiling water bath and boiled for 3 min. By means of vacuum desiccation at 60-80° the vol. was reduced to 1/10 of the original. A sample of the concentrate equivalent to 300-400 mg. of tissue is placed on the 154M paper. In the case of upward (ascending) type of chromatography an 80% H_2O soln. of Me_2CO was used which ascended approx. 50 cm. in 3 hrs. Several runs were made at one time. For the development of distribution positions of nicotinic acid and nicotinamide the method of Krautets'kil (C.A. 48, 6910s) was used. Within an hr. yellow spots appeared. The position of co-dehydrogenase was made visible by subjecting another chromatostrip for 1 hr. to the activity of a 1:1 mixt. of acetone and NH_4OH ; this resulted in the appearance of clear-cut fluorescent spots under ultraviolet illumination. For the detn. the corresponding spot positions of another chromatogram were treated chemically as follows: the exts. of nicotinic acid and the nicotinamide were treated by the Krautets'kil method. The co-dehydrogenase ext. was tested by the fluorescent method following treatment with acetone at alk. pH. Other substances such as adenosine triphosphate whose R_f is nearly identical to that of the co-dehydrogenases may be present in the co-dehydrogenase ext. When that is suspected, another 110 ext. of co-dehydrogenase spot is subjected to supplemental acid hydrolysis, after which it is treated by the method as for nicotinic acid and final detn. made colorimetrically. It was found that some of the methods proposed heretofore for the detn. of co-dehydrogenase produced high results. B. S. Levine

Changes in the oxidation of some dehydrates of the brain and muscles in evipan narcosis. R. V. Chagovskii, R. V. Lukhina, and L. M. Borovikova. *Izv. Akad. Nauk SSSR Ser. Ukr. S.-R.* 1956, 1: 408-12 (1956) (Russian summary). In rabbits under evipan narcosis for one hr. there occurs a deactivation of the reducing substances of the gray matter of the cerebral and in the skeletal muscles, while the lactic and glutamic dehydrates become activated under certain conditions. In the muscles of the thigh there is a similar deactivation in the reducing substances and an activation of the dehydrates of glutamic, lactic, and citric acids. Muscle pulp of rabbits kept under evipan narcosis for 1 hr. loses its ability to utilize added glycogen. (2)

KUZNETSOVA, L. N.


From the Russian for Dr. Julian Kanfer

Ukrainakii Biokhimicheskii Zhurnal,
20, 2: 266-268, 1948.

Splitting of diketogulonic acid in the tissues of the animal organism
by

S. I. Vinokurov and L. N. Kuznetsova

(Institute of Biochemistry of the UkrSSR Academy of Sciences, Kiev)

Translated at the National Institutes of Health, Bethesda, Maryland.
Full translation available in /M.

KUZNETSOVA, L. N.

Vendt V.P. I Kuznetsova, L.N.

33936. 'Növy Myetod Opryedyelyeniya Vitamina A V Pryeparatakh Kontsyentratakh I Rybikh Zhirakh. Ukr. Biokhim. Zhurnal, 1949. No 3, C. 218-27.
Na Ukr. Yaz. — Ryezyumye Na Rus. Yaz. — Bibliogr: 7 Nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 46, Moskva, 1949.

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928220008-0

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928220008-0"

KUZNETSOVA, L.N.

Vitamin A in the liver of Black Sea rays. Vitaminy no.1:100-105 '53
(MIRA 11:6)

1. Institut biokhimi AN USSR, Kiev.
(VITAMINS--A)
(BLACK SEA--RAYS (FISHES))

ZADERIY, I.I., KUZNETSOVA, L.N.

Features of the vitamin A content of cattle livers in Transcarpathian Province. Vitaminy no.1:166-167 '53 (MIRA 11:6)

1. Zakarpatskaya kompleksnaya opyt'naya stantsiya Ministerstva sel'skogo khozyaystva USSR i Institut biokhimii AN USSR, Moskva.

(VITAMINS--A)

(TRANSCARPATHIAN PROVINCE--CATTLE)

KUZNETSOVA, L.N., LAKHNO, Ye.V., CHAGOVETS, R.V.

Vitamin metabolism in muscles in different functional states.
Vitaminsy no.1:174-184 '53 (MIRA 11:6)

1. Institut biokhimi AM USSR, Kiev.
(VITAMIN METABOLISM)
(MUSCLE)

KUZNETSOVA, L.N.; LAKHNO, Ye.V.; OSTROUKHOVA, V.A.; RYBINA, A.A.;
~~CHAGOVNIS~~ CHAGOVNIS, R.V.

Effect of reducing the temperature of the organism on the metabolism
of pyridine and thiamine compounds. Vitaminy no.2:86-97 '56.

(MLRA 10:8)

1. Institut biokhimii Akademii nauk USSR, Kiev
(COLD--PHYSIOLOGICAL EFFECT) (PYRIDINE) (THIAMINE)

KUZNETSOVA, L.N. [Kuznetsova, L.M.]; KOVALEVA, V.N. [Koval'ova, V.M.], studentka

Thin layer chromatography and quantitative determination of vitamin
A alcohol and of its ethers. Ukr. biokhim. zhur. 36 no.2:302-307 '64.
(MIRA 17:11)

1. Institute of Biochemistry of the Academy of Sciences of the Ukrainian S.S.R., Kiev.

KUZNETSOVA, L.N. [Kuznietsova, L.M.]; KOVALEVA, V.N. [Koval'ova, V.M.]

Effect of cortisone on the content and conversion of vitamin A
forms in rats. Ukr. biokhim. zhur. 37 no.3;397-404 '65. (MIRA 18;7)

1. Institut biokhimii AN UkrSSR, Kiyev.

ACC NR: AR7004101 (N) SOURCE CODE: UR/0169/66/000/012/V018/V019

AUTHOR: Kuznetsova, L. N.

TITLE: Vertical circulation in the Arctic and Antarctic regions in the formation of abyssal waters

SOURCE: Ref. zh. Geofiziak, Abs. 12V112

REF SOURCE: Sb. 2-y Mezhdunar. okeanogr. kongress, 1966. Tezisy dokl. M., Nauka, 1966, 225

TOPIC TAGS: oceanography, ocean current, ocean dynamics, water circulation, abyssal water formation, Arctic water dynamics, Antarctic water dynamics

ABSTRACT: The formation of abyssal waters is one of the important problems in the study of general oceanic circulation. However, the mechanism and process of surface water sinking to great depths has not yet been studied sufficiently, and there is no agreement on the matter among oceanographers. In this work, two basic processes in the sinking of surface waters are examined: convective mixing, which takes place during the autumn-winter period of cooling, and vertical circula-

Card 1/3

UDC: 551.465.1

ACC NR: AR7004101

tion, which arises in moving currents. Convection parameters are calculated using the N. N. Zubov method and take into account compaction. Vertical motion of dynamic origin is determined by the Hidaka method. The calculations are based on data obtained during the IGY. Maximum convection depth for abyssal waters formed in the Arctic was determined as 1100 m, and for the Antarctic as 1300 m, and Sverdrup's and Wust's opinions on the existence in these regions of large-scale convection reaching to the bottom was not confirmed. Apparently, large-scale convection takes place only in individual years characterized by anomalously high heat transfer and a favorable thermocline structure of the water. The location of zones of maximum convection depth in general was found to coincide with regions of abyssal water formation as determined by Deacon, Sverdrup, Mosby and others. A determination is made of the average rate of the development of convection. Vertical circulation of dynamic origin was found to be of a complex nature. Both in the Arctic and Antarctic sources of abyssal water formation, there are, in addition to zones of sinking waters, also zones of rising waters. The speeds of these phenomena were found to be within the limits of accepted evaluations. A similar calculation for an Antarctic source (the Weddell Sea) was made for the first time. An evaluation was made of the accuracy of the obtained picture, through a comparison of the distribution of hydrochemical and

Card 2/3

ACC NR: AR7004101

biological elements. A close connection was found to exist between the amount of oxygen and vertical motion. It is shown that the process of convection develops in these regions at a rate which is at least greater by one order than the motion of vertical circulation of dynamic origin. It is concluded that the role of convection is predominant in the complex process of water sinking. Data are presented on the amount of sinking water in both sources. The problem of the age of abyssal waters is also examined. [Translation of author's abstract] [SP]

SUB CODE: 08/

Card 3/3

SOSKIN, I.M.; KUZNETSOVA, L.N.; SOLOV'YEV, V.I.

Baltic Sea currents based on the use of the dynamic method to
process hydrological observations. Trudy GOIN no.73:76-95 '63.
(MIRA 16:7)

(Baltic Sea—Ocean currents)

KUZNETSOVA, L. N.

KUZNETSOVA, L. N. — "Author's Abstract of Dissertation on the Subject 'Study of the Influence of Antimony on the Dissolving of Gold in the Cyanidization Process,' Presented in Competition for the Academic Degree of Candidate in Technical Sciences." Min Higher Education USSR, Moscow Inst of Nonferrous Metals and Gold imeni Kalinin, Moscow, 1955 (Dissertation For the Degree of Doctor of Technical Sciences)

SO: Knizhnaya letopis', No. 37. 3 September 1955

KUZNETSOVA, L.N.; MITROPANOV, S.I.

On the mechanism of cyanide and zinc sulfate depression of heavy-metal sulfide minerals. TSvet.met.29 no.3:5-9 Mr '56. (MLRA 9:7)

1. Nigrizolats:

(Radioactive tracers--Industrial application)(Zinc--Metallurgy)(Cyanides)

KUZNETSOVA, L. N.

137-1958-3-4532

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 8 (USSR)

AUTHOR: Kuznetsova, L. N.

TITLE: Interaction of Depressors and Collectors in the Flotation of
Polymetallic Ores (Vzaimodeystviye depressantov i
sobirately v protsesse flotatsii polimetallicheskih rud)

PERIODICAL: Tr. n.-i. gornorazved. in-ta "Nigrizoloto", 1957, Nr 22,
pp 124-134

ABSTRACT: The purpose of this work was the investigation of the effect of complex Fe cyanides on the interaction of minerals with collectors: on the adsorption of collectors by the surface of the sulfides and the desorption of xanthate. The minerals chalcopyrite, covellite, sphalerite, galenite, pyrite, and arseno-pyrite were investigated. Ethyl xanthate, K, containing the radio isotope S^{35} , was employed. Adsorption of xanthate occurs most readily in a neutral medium, but may also take place in an acidic medium ($pH = 3-4$), when the xanthate appears in the molecular form of xanthate acid. This fact points to the existence of molecular adsorption. Yellow potassium ferricyanide, $K_4[Fe(CN)_6]$, acts as a desorbent for the xanthate and as a depresser for some sulfide minerals.

Card 1/2

137-1958-3-4532

Interaction of Depressors and Collectors in the Flotation (cont.)

The depressing action of the complex Fe cyanides is a function of the pH value. A parallel pattern of behavior is established for the adsorption density of the xanthate film on the surface of the minerals and the floatability of the latter under given conditions. A method for the separation of galenite and chalcopyrite with the aid of $K_4 [Fe(CN)_6]$ is outlined together with a method for improving the quality of Cu concentrates by depressing chalcopyrite and by flotating pyrite in a neutral medium. Chalcopyrite can also be flotated, providing the pyrite is depressed in a strongly acidic medium.

A. Sh.

Card 2/2

SOV/137-58-9-20281

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 309 (USSR)

AUTHORS: Fridman, I.D., Kuznetsova, L.N., Popova, N.N.

TITLE: Utilization of Radioactive Isotopes in Assaying (Primeneniye radioaktivnykh izotopov v probirnom analize)

PERIODICAL: Tr. N.-i. gornorazved. in-ta "Nigrizoloto", 1957, Nr 23, pp 112-115

ABSTRACT: Preliminary experiments with the utilization of the radioactive isotope of Au were carried out for the determination of losses in slags during the smelting of the tailings of the cyanidation of Au ores. An initial KAu(CN)_2 solution of specified concentration was prepared. Weighed test samples of pure quartz were placed in porcelain cups and covered with the solution with which a measured amount of Au was introduced for every experiment. The test samples were dried on a water bath, mixed with fluxes, and melted. The results of the fluxing were determined by the (Au) in the slags by the method of measuring the activity in impulses without recalculating into mg. The results of the experiments conducted have shown that the lowest losses of Au in slags occur in the case of fluxing

Card 1/2

SOV/137-58-9-20281

Utilization of Radioactive Isotopes in Assaying

with Na_2S followed by washing of the slag with Pb and of fluxing to obtain a Cu regulus. Also checked by the process indicated were the various methods of preparation of the mixture with unequal amounts of litharge and various screen sizes of the test sample. The losses of Au in the process of cupellation owing to the absorption of Au by the cupel were likewise ascertained.

Yu.B.

1. Ores--Analysis
2. Radioisotopes--Applications

Card 2/2

SOV/137-58-10-20408

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 8 (USSR)

AUTHORS: Kuznetsova, L. N., Mitrofanov, S. I.

TITLE: The Influence of Pulp pH on the Desorption of a Collector From the Surface of Sulfide Minerals by Complex Iron Cyanides
(Vliyaniye pH pul'py na desorbtsiyu sobiratelya s poverkhnosti sul'fidnykh mineralov kompleksnymi tsianidami zheleza)

PERIODICAL: Tr. N. -i. gorno-razved. in-ta "Nigrizoloto", 1957, Nr 23, pp 116-121

ABSTRACT: In this work a study is made of the influence of complex Fe cyanides on the adsorption and desorption of a collector from the surfaces of sulfides. Investigation of the reaction of collector and complex Fe cyanides on the surface of sulfides was performed in terms of relation to pH value under conditions of rigorous and constant control thereof. The method of investigation is adduced, and the results thereof are set forth. Investigations have determined that the action of the cyanides depend upon pH. $K_4[Fe(CN)_6]$ is a good desorbent and depressant for a number of sulfide minerals. All the minerals may be arranged in series in declining order of degree of "depression" by $K_4[Fe(CN)_6]$.

Card 1/2

SOV/137-58-10-20408

The Influence of Pulp pH on the Desorption of a Collector (cont.)

as follows: $\text{CuS} \rightarrow \text{activated ZnS} \rightarrow \text{PbS} \rightarrow \text{FeS}_2$. The optimum pH values for various minerals at which the best desorption of collector is observed are determined. A parallelism is found between the phenomenon of xanthate desorption from mineral surfaces and floatability. It is demonstrated that it is possible to separate various sulfide minerals at strictly determinate pH values.

N. M.

1. Hydrogen ion concentration--Chemical effects
2. Metal sulfides--Surface properties
3. Minerals--Flotation
4. Iron cyanide--Chemical reaction

Card 2/2

KUZNETSOVA, L.N. + SEREBRYANYI, B.L.

Determination of gamma-quantities of indium and gallium in ores
and products of their treatment using the method of isotope
dilution. Izv.vys.ucheb.zav.; tsvet.met. 5 no.3:107-112 '62.
(MIRA 15:11)

1. Tsentral'nyy nauchno-issledovatel'skiy geologorazvedochnyy
institut.

(Indium) (Gallium)
(Radioisotopes—Industrial applications)

FRIDMAN, I.D.; KUZNETSOVA, L.N.; SEREBRYANY, B.L.

Effect of iron and thiocyanates on the purification process
of waste waters in gold recovery plants by the ion exchange
method. Zhur. prikl. khim. 38 no.3:482-487 Mr '65.
(MIRA 18:11)

1. Submitted April 29, 1963.

POSTNOV, Anatoliy Vasil'yevich, kand. tekhn. nauk; ATLAS, Boris Aleksandrovich, kand. ekon. nauk. Prinimali uchastiye: SHAPOSHNIKOV, Ye.M., kand. tekhn. nauk; MATSVEYKO, A.N., inzh.; STOLBOV, A.G., inzh.; GDALEVICH, S.S.; ALEKSANDROV, V.V., inzh.; NEVOLIN, V.V., inzh. ~~retsensent~~; KUZNETSOVA, L.N., ~~retsensent~~; DROZDOV, B.M., nauchn. red.; ~~MAKRUSHINA, A.N., red.~~

[Use of computing techniques in water transportation] Primenenie vychislitel'noi tekhniki na vodnom transporte. Moskva, Transport, 1965. 215 p. (MIRA 18:7)

1. Kafedra ekspluatatsii Novosibirskogo instituta inzhenerov vodnogo transporta (for Drozdov).

MURAV'YEV, F.A.; KUZNETSOVA, L.P.

Inadequacy of the standards for raw hides and finished leather goods. Kozh.-obuv.prom. 2 no.6:37-38 Je '60. (MIRA 13'9)

1. Glavnyy inzhener Taganrogskogo kozhevennogo zavoda No.1 (for Murav'yev). 2. Nachal'nik dubil'nogo tsakha khromovogo proizvodstva Taganrogskogo kozhevennogo zavoda No.1 (for Kuznetsova).
(Leather--Standards)

KUZNETSOVA, L.P.

Electrophysiological investigation of the threshold of visual sensation of a dark-adapted frog eye and the effect of red and blue lights on it. Biofizika 5 no. 4:404-411 '60. (MIRA 13:12)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(NIGHT VISION)

MARCHUK, G.I.; ILYASOVA, G.A.; KOLESOV, V.Ye.; KOCHERGIN, V.P.;
KUZNETSOVA, L.P.

[Critical mass of aqueous mixtures of uranium and plutonium
compounds] Kriticheskie massy vodnykh smesei soedinenii
urana i plutoniia. Moskva, Glav. upr. po ispol'zovaniu
atomnoi energii, 1960. 23 p. (MIRA 17:1)
(Uranium compounds) (Plutonium compounds)

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KUZNETSOV, L.
AUTHOR: Yevgen'yev I., and Kuznetsova L.

4-6-23/30

TITLE: The Achievements of a Scientist (Podvig uchenogo).

PERIODICAL: Znaniye - Sila, 1957, Nr 6, pp 30-34 (USSR)

ABSTRACT: This is an extract from a novel written by Yevgen'yev and Kuznetsov on the life and work of the famous Soviet scientist Leonid Alekseyevich Kulik. Kulik was an outstanding mineralogist, who concentrated his work on research in meteorites, in particular on the Tunguska meteorite.

A collaborator of the late A.Ye.Fersman (Academician) and secretary of the Committee on Meteorites created at the USSR Academy of Sciences, Kulik undertook many expeditions to all parts of his country and in particular to Siberia to discover splinters of the Tunguska meteorite. But he did not succeed in finding these fragments. It was later stated that the meteorite, which flew towards the Earth with a speed of 4 - 5 km per second, must have exploded when hitting the earth surface and left no splinters.

Kulik fought in the Red Army during World War II, was taken prisoner by the Germans and died in a prisoner of war camp, in 1942. He was 61 years old.

Card 1/2

The Achievements of a Scientist

4-6-23/30

There are 10 sketches.

AVAILABLE: Library of Congress

Card 2/2

KUZNETSOVA, L.

AUTHOR: Yevgen'yev, I. and Kuznetsova, L.

4-12-21/24

TITLE: The Tungus⁴Meteorite Was Found (Tungusskiy meteorit nayden)

PERIODICAL: Znaniye - Sila, 1957, # 12, p 59-60 (USSR)

ABSTRACT:

The authors describe the research done in connection with the Tungus⁴Meteorite, which was first conducted by L.A. Kulik. The authors were informed by Yevgeniy Leonidovich Kirov, Learned Secretary of the Committee on Meteorites (Uchenyy sekretar' Komiteta po meteoritam) that particles from the famous meteorite have been found after many years of investigations. Kulik brought from his expedition to the Tungus⁴Steppe earth samples which could not be investigated at the time due to the lack of proper instruments. They were kept at the Academy of Sciences. In the meantime, the science on meteorites developed and theoretical and practical knowledge increased. Professors Fedynskiy and Stanyukovich proved theoretically that the Tungus⁴meteorite must have exploded and evaporated. The large Sikhote-Alinsk meteorite fell in the Primorskiy Kray in 1947. It was stated that this and other meteorites left small globules and splinters in the earth. During the fall of meteorites a long train is formed by drops of meteorite substances, which in the air are transformed into small globules and cover the earth surface after

Card 1/2

The Tungus Meteorite Was Found

4-12-21/24

the fall. On the place where the Sikhote-Alinsk meteorite had fallen, small splinters besides the globules were discovered. They were investigated with the aid of chemistry. It is known that iron ore does not contain more than 3-4 % of nickel. If the content of nickel exceeds this amount, then the iron ore is of no terrestrial origin. This prognosis was confirmed. The Sikhote-Alinsk meteorite particles contained about 6 % of nickel. The examination of the Kulik samples was referred to Aleksandr Aleksandrovich Yavnel', senior scientific collaborator. He discovered some shiny globules in the earth samples but he lost them again and could only rediscover them with the aid of a special needle, the thorn of a southern acacia. He found nine tiny globules with a diameter of a hundredth of millimeter, and photographed these. He discovered, moreover, splinters which were examined by spectral analysis. The spectrum was photographed and revealed a content of at least 7 % of nickel. To be sure, the scientists sent the splinters to Academician Vinogradov for microchemical analysis. This analysis confirmed that the iron contained 7-10 % of nickel, which led to the conclusion that the particles came from the giant Tungus meteorite.

There are 3 photographs.
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AVAILABLE:
Card 2/2

KUZNETSOVA, L.P.

36-72-7/13

AUTHOR: Kuznetsova, L.P.

TITLE: Effect of Relief and Forests on Distribution and Amounts of Precipitation on Plains (Rol' rel'yefa i lesov v raspredelenii kolichestva osadkov na ravnine)

PERIODICAL: Trudy Glavnoy geofizicheskoy observatorii, 1957, Nr 72, pp.76-91 (USSR)

ABSTRACT: The distribution of precipitation on a plain is a complex phenomenon, not always explained by the elements of general circulation. A study of precipitation in several geographic regions of the USSR (described in detail) shows that both elevation and surface roughness play an important part in inducing precipitation; also that forests are secondary to relief in their effect on precipitation. The effect of leeward and windward sides, are all discussed in detail, with specific reference to the present study. Instrument mentioned: cavity ("yamochnyy") rain gauge. Authors mentioned: Alisov, B.P., Drozdov, O.A., Rubinshteyn, Ye. S., Alpat'yev, A.M., Belinskiy, N.A., Bereznova, I.A., Danilova, L.P., Budyko, M.I., L'vovich, M.I., Pogosyan, Kh.P., Saposhnikova, S.A., Yudin, M.I., Buchinskiy, I.Ye.,

Card 1/2

36-72-7/13

Effect of Relief and Forests on Distribution and Amounts of Precipitation
on Plains (Cont.)

Vetlov, I.P., Petrenko, N.V., Voyaykov, A.I., Dorodnitsyn, A.A.,
Kalinin, G.P., Abal'yan, T.S., Koloskov, P.I., Kostin, S.I., Pokrovskaya, T.B.,
Fel'dman, Ya.I., Fedorov, Ye.Ye., Anapol'skaya, L.Ye., Grigor'yeva, A.S.,
Bregina, A.Yu., Shcherbakova, Ye.Ya., Orlova, V.V., Tyukhtin, V.V.; Kociba, Al.
(Poland), Passzynski, J. (Poland), and Rein, F. (Czech.). There are 4 figures,
2 tables, and 32 references, 25 of which are USSR.

AVAILABLE: Library of Congress

Card 2/2

KUZNETSOVA, L.P.

Mechanism of the influence of elevations on precipitation. Trudy
GGO no.111:71-76 '61. (MIRA 15:1)
(Valdai Hills--Precipitation (Meteorology))